

Abstract of the Disclosure

A face detection and tracking system and method by which a plurality of faces can be detected and tracked in real time are provided. The face detection and tracking system for detecting and tracking a plurality of faces in real time from an input image comprises a background removing unit which extracts an area having a motion by removing the background image from the input image; a candidate area extracting unit which extracts a candidate area in which a face can be located in the area having a motion, by using a skin color probability map (P_{skin}) generated from a face skin color model and the global probability map (P_{global}); a face area determination unit which extracts independent component analysis (ICA) features from a candidate area and determines whether or not the candidate area is a face area by using the trained SVM classifier; and a face area tracking unit which tracks a face area according to a directional kernel indicating a probability that a face is located in a next frame, based on the skin color probability map.